AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A method for engineering cartilage tissue by three-dimensionally culturing bone marrow cells in a simulated microgravity environment.

2. (original): The method according to claim 1, wherein the simulated microgravity environment provides gravity that is 1/10 to 1/100 of the ground gravity to an object on a time-average basis.

3. (currently amended): The method according to claim 1 ~~or 2~~, wherein the simulated microgravity environment is attained with the use of a bioreactor that realizes a simulated microgravity environment on the earth by compensating the ground-gravity ~~by~~ with the stress resulting from rotation.

4. (original): The method according to claim 3, wherein the bioreactor that realizes a simulated microgravity environment on the ground is a uniaxial rotary bioreactor.

5. (original): The method according to claim 4, wherein the bioreactor that realizes a simulated microgravity environment on the ground is a Rotating Wall Vessel (RWV) bioreactor.

6. (original): The method according to claim 5, wherein culture is conducted by seeding bone marrow cells at a density of 10^6 to 10^7 cells/cm^3 at a rotation speed of 8.5 to 25 rpm when a 5-cm RWV vessel is used.

7. (currently amended): The method according to ~~any one of claims 1 to 6~~claim 1, wherein culture is conducted by adding TGF-β and/or dexamethasone to a culture medium.

8. (currently amended): The method according to ~~any one of claims 1 to 7~~claim 1, wherein bone marrow cells are two-dimensionally cultured to confluence, subcultured, and then cultured in a simulated microgravity environment.

9. (currently amended): The method according to ~~any one of claims 1 to 8~~claim 1, wherein the bone marrow cells are isolated from a ~~patient~~subject in need of transplantation of the engineered cartilage tissue.